

PERFORMANCE SPECIFICATION

SEMICONDUCTOR DEVICE, DIODE, SILICON, SCHOTTKY RECTIFIER,
 TYPES 1N6892UTK1, 1N6893UTK1, 1N6894UTK1, 1N6895UTK1, 1N6892UTK1CS,
 1N6893UTK1CS, 1N6894UTK1CS, 1N6895UTK1CS, 1N6892UTK1AS,
 1N6893UTK1AS, 1N6894UTK1AS, AND 1N6895UTK1AS
 JANTX, JANTXV, JANS

This specification is approved for use by all Departments
 and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers the performance requirements for silicon, Schottky power surface mount rectifier diodes in a low profile package. Three levels of product assurance are provided for each device type as specified in MIL-PRF-19500.

1.2 Physical dimensions. See figure 1.

1.3 Maximum ratings. Unless otherwise specified, maximum ratings ($T_C = +25^\circ\text{C}$).

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Types	V_{RWM}	I_O $T_C = +100^\circ\text{C}$	I_{FSM} $t_p = 8.3$ ms, $T_C = +25^\circ\text{C}$	$R_{\theta JC}$ (cathode)	$R_{\theta JC}$ (anode)	T_{STG} and T_J
	V dc	A dc	A (pk)	$^\circ\text{C/W}$	$^\circ\text{C/W}$	$^\circ\text{C}$
1N6892UTK1, CS, AS	45	100	750	.35	.50	-65 to +175
1N6893UTK1, CS, AS	60	100	750	.35	.50	-65 to +175
1N6894UTK1, CS, AS	80	100	750	.35	.50	-65 to +175
1N6895UTK1, CS, AS	100	100	750	.35	.50	-65 to +175

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Defense Supply Center, Columbus, ATTN: DSCC/VAC, P.O. Box 3990, Columbus, OH 43216-5000, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

1.4 Primary electrical characteristics. Unless otherwise specified, $T_C = +25^\circ\text{C}$.

Column 1	Column 2		Column 3	Column 4		Column 5
Types	V_F Maximum forward voltage (volts) at I_F $T_C = +25^\circ\text{C}$		V_F Maximum forward voltage (volts) $T_C = +125^\circ\text{C}$ at I_F	I_R Maximum reverse current mA at V_{RWM} (see column 2)		C_J Maximum junction capacitance f = 1MHz $V_R = 5\text{ VDC}$
	50A	100A	100A	$T_J = +25^\circ\text{C}$	$T_J = +125^\circ\text{C}$	pF
1N6892UTK1, CS, AS	.70	.80	.67	2.5	25	5,000
1N6893UTK1, CS, AS	.73	.83	.70	2.5	25	4,000
1N6894UTK1, CS, AS	.78	.88	.76	2.5	25	3,800
1N6895UTK1, CS, AS	.83	.92	.83	2.5	15	4,000

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATION

DEPARTMENT OF DEFENSE

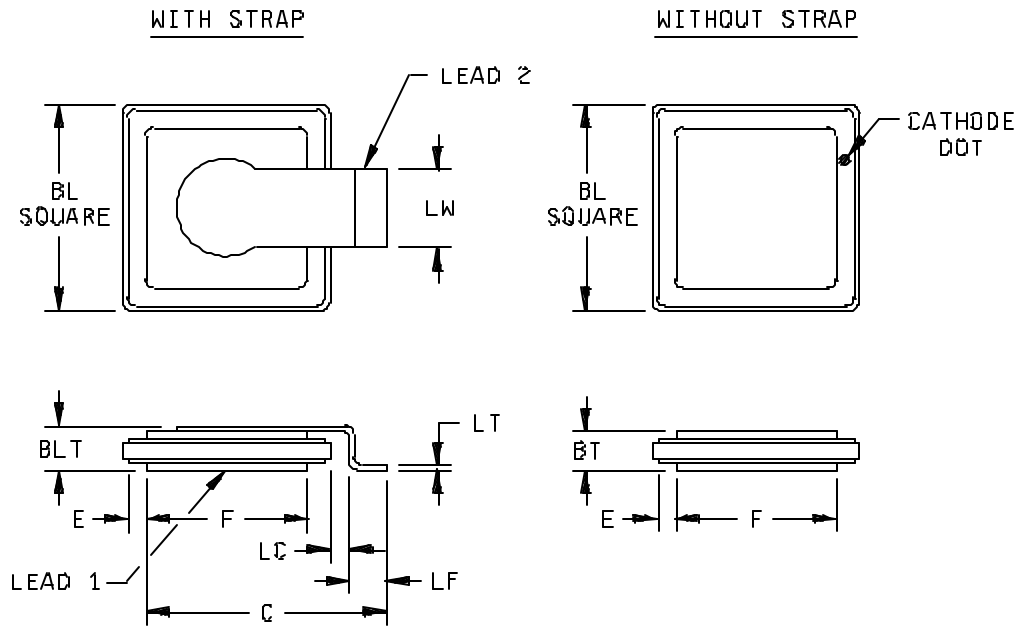
MIL-PRF-19500 - Semiconductor Devices, General Specification for.

STANDARD

DEPARTMENT OF DEFENSE

MIL-STD-750 - Test Methods for Semiconductor Devices.

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Document Automation and Production Service (DAPS), Building 4D (NPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)



Ltr	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
BL	.368	.388	9.35	9.86
BT		.090		2.29
BLT		.100		2.54
C	.421	.461	10.69	11.71
E	.030 NOM		.76 NOM	
F	.289	.299	7.34	7.59
LT	.005	.015	.127	.381
LC	.040 NOM		1.02 NOM	
LF	.055	.075	1.40	1.91
LW	.135	.165	3.43	4.19

NOTES:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. In accordance with ASME Y14.5M, diameters are equivalent to ϕ symbology.
4. For anode, cathode, and strap connections, see 3.4.3.

FIGURE 1. Dimensions and configuration.

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 General. The individual item requirements shall be as specified in MIL-PRF-19500 and as modified herein.

3.2 Qualification. Devices furnished under this specification shall be products that are manufactured by a manufacturer authorized by the qualifying activity for listing on the applicable qualified manufacturer's list (QML) before contract award (see 4.2 and 6.3).

3.3 Abbreviations, symbols, and definitions. Abbreviations, symbols, and definitions used herein shall be as specified in MIL-PRF-19500.

3.4 Interface and physical dimensions. The interface and physical dimensions shall be as specified in MIL-PRF-19500, and on figure 1 herein.

3.4.1 Diode construction. These devices shall be constructed utilizing double plug construction with eutectic bonding between both sides of the silicon die and terminal pins (see MIL-PRF-19500). Metallurgical bond shall be in accordance with the requirements of category II in MIL-PRF-19500. The diode body is ceramic. All seals are eutectic solder. Strap material is a copper alloy or copper sandwich. The 1N6892UTK1, 1N6893UTK1, 1N6894UTK1, and 1N6895UTK1 have no strap. The strap connects to the cathode on 1N6892UTK1CS, 1N6893UTK1CS, 1N6894UTK1CS, and 1N6895UTK1CS and to the anode on 1N6892UTK1AS, 1N6893UTK1AS, 1N6894UTK1AS, and 1N6895UTK1AS.

3.4.2 Lead formation and finish. Unless otherwise specified, lead finish (pads, bottom pad and strap foot) shall be solderable in accordance with MIL-PRF-19500 and herein. Where a choice of lead finish or formation is desired, it shall be specified in the acquisition document (see 6.2).

3.4.3 Polarity. Polarity shall be marked with the appropriate diode symbol on the strap or with a dot on the cathode side of the seal ring on no strap devices (see figure 1).

3.5 Marking. Marking shall be in accordance with MIL-PRF-19500 and herein. All marking may be omitted from the device except for the polarity marking. When present, part number may be abbreviated (ex: JS6892UTK1 for JANS1N6892UTK1). All marking that is omitted from the body of the device shall appear on the label of the initial container.

3.6 Electrical performance characteristics. Unless otherwise specified herein, the electrical performance characteristics are as specified in 1.3, 1.4 and table I.

3.7 Electrical test requirements. The electrical test requirements shall be the subgroups specified in table I herein.

3.8 Workmanship. Semiconductor devices shall be processed in such a manner as to be uniform in quality and shall be free from other defects that will affect life, serviceability, or appearance.

4. VERIFICATION

4.1 Classification of inspections. The inspection requirements specified herein are classified as follows:

- a. Qualification inspection (see 4.2).
- b. Screening (see 4.3).
- c. Conformance inspection (see 4.4 and tables I, II, and III).

4.2 Qualification inspection. Qualification inspection shall be in accordance with MIL-PRF-19500.

4.2.1 Construction verification. Cross sectional photos from three devices shall be submitted in the qualification report.

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4.3 Screening. Screening shall be in accordance with table IV of MIL-PRF-19500, and as specified herein. The following measurements shall be made in accordance with table I herein. Devices that exceed the limits of table I herein shall not be acceptable.

Screen (see table IV of MIL-PRF-19500)	Measurement	
	JANS level	JANTX and JANTXV levels
3b	Condition A, one pulse, $I_o = 0$, $V_{RWM} = 0$, I_{FSM} = see 1.3, column 4 herein.	Condition A, one pulse, $I_o = 0$, $V_{RWM} = 0$, I_{FSM} = see 1.3, column 4 herein.
(1) 3c	Thermal impedance (see 4.3.1)	Thermal impedance (see 4.3.1)
4	Not applicable	Not applicable
5	Not applicable	Not applicable
8	NOTE: Serialization required.	Not applicable
9	Not applicable	Not applicable
10	Not applicable	Not applicable
11	V_{F1} and I_{R1}	V_{F1} and I_{R1}
12	Method 1038 of MIL-STD-750, test condition A; $T_C = 150^\circ\text{C}$, $t = 240$ hours, $V_{RM} = 80$ percent of rated V_{RWM} = see 1.3, column 2 herein V (pk), $I_o = 0$, $f = 60$ Hz; alternate test: $V_{RM} = 80$ percent of rated V_{RWM} = see 1.3, column 2 herein V dc and $T_C = 150^\circ\text{C}$	Method 1038 of MIL-STD-750, test condition A; $T_C = 150^\circ\text{C}$, $t = 48$ hours, $V_{RM} = 80$ percent of rated V_{RWM} = see 1.3, column 2 herein V (pk), $I_o = 0$, $f = 60$ Hz; alternate test: $V_{RM} = 80$ percent of rated V_{RWM} = see 1.3, column 2 herein V dc and $T_C = 150^\circ\text{C}$
13	Subgroup 2, of table I herein excluding thermal impedance, and subgroup 3 of table I herein, V_{F1} and I_{R1} ; $\Delta V_{F1} = \pm 50$ mV (pk); $\Delta I_{R1} = \pm 1$ mA dc or 100 percent from the initial value, whichever is greater. Scope display evaluation (see table I, subgroup 7).	Subgroup 2, of table I herein excluding thermal impedance; V_{F1} and I_{R1} ; $\Delta V_{F1} = \pm 50$ mV (pk); $\Delta I_{R1} = \pm 1$ mA dc or 100 percent from the initial value, whichever is greater. Scope display evaluation (see table I, subgroup 7).
15	Not applicable	Not applicable

(1) Thermal impedance shall be performed any time after screen 3.

4.3.1 Thermal impedance $Z_{\theta JX}$ measurements for screening. The $Z_{\theta JX}$ measurements shall be performed in accordance with method 3101 of MIL-STD-750. The maximum limit for $Z_{\theta JX}$ in screening (table IV of MIL-PRF-19500) shall be derived by each vendor by means of statistical process control. When the process has exhibited control and capability, the capability data shall be used to establish the fixed screening limit. In addition to screening, once a fixed limit has been established, monitor all future sealing lots using a random five piece sample from each lot to be plotted on the applicable X bar R chart. If a lot exhibits an out of control condition, the entire lot shall be removed from the line and held for engineering evaluation and disposition.

4.3.2 Thermal impedance ($Z_{\theta JX}$ measurements) for initial qualification or requalification. The $Z_{\theta JX}$ measurements shall be performed in accordance with method 3101 of MIL-STD-750 (read and record date $Z_{\theta JX}$). $Z_{\theta JX}$ shall be supplied on one lot (50 pieces minimum) and a thermal response curve shall be submitted. Five of these samples shall be serialized and provided to the qualifying activity for correlation.

4.4 Conformance inspection. Conformance inspection shall be in accordance with MIL-PRF-19500.

4.4.1 Group A inspection. Group A inspection shall be conducted in accordance with MIL-PRF-19500 and table I herein.

4.4.2 Group B inspection. Group B inspection shall be conducted in accordance with the conditions specified for subgroup testing in tables VIa (JANS) and VIb (JAN, JANTX, and JANTXV) of MIL-PRF-19500 and 4.4.2.1 and 4.4.2.2 herein. Electrical measurements (end-points) shall be in accordance with table I, subgroup 2, forward voltage test (V_{F1}) and reverse leakage test (I_{R1}) herein. Delta measurements shall be in accordance with table III herein.

4.4.2.1 Group B inspection, table VIa (JANS) of MIL-PRF-19500.

<u>Subgroup</u>	<u>Method</u>	<u>Condition</u>
B3	4066	I_{FSM} = rated (see 1.3, column 4 herein), I_O = rated (see 1.3, column 3 herein), V_{RWM} = rated (see 1.3, column 2 herein); 10 surges of 8.3 ms each at 1 minute intervals. Condition A $+100^{\circ}\text{C} \leq T_C \leq +125^{\circ}\text{C}$.
B4	1037	$\Delta T_C = +85^{\circ}\text{C}$, $I_F = 2$ A minimum for 2,000 cycles.
B5	1038	Condition B, $I_F = 1$ A dc minimum, adjust T_A and I_F to achieve $T_J = +175^{\circ}\text{C}$, $+0^{\circ}\text{C}$, -35°C , $t = 240$ hours min; (heat sinking allowed).

4.4.2.2 Group B inspection, table VIb (JAN, JANTX, and JANTXV) of MIL-PRF-19500.

<u>Subgroup</u>	<u>Method</u>	<u>Condition</u>
B2	4066	I_{FSM} = rated (see 1.3, column 4 herein), I_O = rated (see 1.3, column 3 herein), V_{RWM} = rated (see 1.3, column 2 herein); 10 surges of 8.3 ms each at 1 minute intervals. Condition A, $+100^{\circ}\text{C} \leq T_C \leq +125^{\circ}\text{C}$.
B3	1037	$\Delta T_C = +85^{\circ}\text{C}$ minimum, $I_F = 2$ A minimum for 2,000 cycles.

4.4.3 Group C inspection. Group C inspection shall be conducted in accordance with the conditions specified for subgroup testing in table VII of MIL-PRF-19500. Electrical measurements (end-points) shall be in accordance with table I, subgroup 2, forward voltage test (V_{F1}) and reverse leakage test (I_{R1}) herein. Delta measurements shall be in accordance with table III herein.

<u>Subgroup</u>	<u>Method</u>	<u>Condition</u>
C5	3101	$I_H = 20 \text{ A to } 50 \text{ A}$, $I_M = 10 \text{ mA to } 250 \text{ mA}$, $t_H = \text{thermal equilibrium}$; $t_{MD} = 200 \mu\text{s}$.
C6	1037	$\Delta T_C = +85^\circ\text{C}$, $I_F = 2 \text{ A}$ minimum for 6,000 cycles.

4.4.4 Group E inspection. Group E inspection shall be conducted in accordance with the conditions specified for subgroup testing in table IX of MIL-PRF-19500 and table II herein. Electrical measurements (end-points) shall be in accordance with table I, subgroup 2, forward voltage test (V_{F1}) and reverse leakage test (I_{R1}) herein. Delta measurements shall be in accordance with table III herein.

4.5 Methods of inspection. Methods of inspection shall be as specified in the appropriate tables as follows.

4.5.1 Pulse measurements. Conditions for pulse measurement shall be as specified in section 4 of MIL-STD-750.

4.5.2 Peak reverse energy test. The Schottky rectifier must be capable of absorbing the reverse energy of 350 rectangular pulse, $t_p = 1 \mu\text{sec}$, $I_R = 2 \text{ A}$ at 1 kHz. This will be performed during wafer or die level prior to device assembly.

TABLE I. Group A inspection.

Inspection 1/ 2/	MIL-STD-750		Symbol	Limits		Unit
	Method	Conditions		Min	Max	
<u>Subgroup 1</u>						
Visual and mechanical examination	2071					
<u>Subgroup 2</u>						
Thermal impedance	3101	$I_M = 10 \text{ mA to } 250 \text{ mA}$, $I_H = 50 \text{ A}$, $t_H = 2 \text{ ms}$, $t_{md} = 200 \mu\text{s}$ maximum.	$Z_{\theta JX}$			
1N6892UTK1, CS,AS					.18	°C/W
1N6893UTK1, CS,AS					.18	°C/W
1N6894UTK1, CS,AS					.18	°C/W
1N6895UTK1, CS,AS					.18	°C/W
Forward voltage	4011	Pulsed test (see 4.5.1) $t_P = 300 \mu\text{s}$	V_{F1}			
1N6892UTK1, CS,AS		$I_F = 50 \text{ A(pk)}$.70	V
1N6893UTK1, CS,AS		$I_F = 50 \text{ A(pk)}$.73	V
1N6894UTK1, CS,AS		$I_F = 50 \text{ A(pk)}$.78	V
1N6895UTK1, CS,AS		$I_F = 50 \text{ A(pk)}$.83	V
Forward voltage	4011	Pulsed test (see 4.5.1) $t_P = 300 \mu\text{s}$	V_{F2}			
1N6892UTK1, CS,AS		$I_F = 100 \text{ A(pk)}$.80	V
1N6893UTK1, CS,AS		$I_F = 100 \text{ A(pk)}$.83	V
1N6894UTK1, CS,AS		$I_F = 100 \text{ A(pk)}$.88	V
1N6895UTK1, CS,AS		$I_F = 100 \text{ A(pk)}$.92	V
Reverse current leakage	4016	DC method	I_{R1}			
1N6892UTK1, CS,AS		$V_R = 45 \text{ V}$			2.5	mA
1N6893UTK1, CS,AS		$V_R = 60 \text{ V}$			2.5	mA
1N6894UTK1, CS,AS		$V_R = 80 \text{ V}$			2.5	mA
1N6895UTK1, CS,AS		$V_R = 100 \text{ V}$			2.5	mA
Breakdown voltage	4021	Pulsed test (see 4.5.1) $t_P = 35 \text{ ms}$	V_{BR1}			
1N6892UTK1, CS,AS		$I_R = 5.0 \text{ mA(pk)}$		50		V
1N6893UTK1, CS,AS		$I_R = 5.0 \text{ mA(pk)}$		66		V
1N6894UTK1, CS,AS		$I_R = 5.0 \text{ mA(pk)}$		88		V
1N6895UTK1, CS,AS		$I_R = 5.0 \text{ mA(pk)}$		110		V

See footnotes at end of table.

TABLE I. Group A inspection – Continued.

Inspection 1/ 2/	MIL-STD-750		Symbol	Limits		Unit
	Method	Conditions		Min	Max	
<u>Subgroup 3</u>						
High temperature operation:		T _C = +125 °C				
Forward voltage	4011	Pulsed test (see 4.5.1) t _p = 300 μs	V _{F3}			
1N6892UTK1, CS,AS		I _F = 100 A(pk)			.67	V
1N6893UTK1, CS,AS		I _F = 100 A(pk)			.70	V
1N6894UTK1, CS,AS		I _F = 100 A(pk)			.76	V
1N6895UTK1, CS,AS		I _F = 100 A(pk)			.83	V
Reverse current leakage	4016	DC method;				
1N6892UTK1, CS,AS		V _R = 45 V	I _{R2}		25	mA
1N6893UTK1, CS,AS		V _R = 60 V			25	mA
1N6894UTK1, CS,AS		V _R = 80 V			25	mA
1N6895UTK1, CS,AS		V _R = 100 V			15	mA
Low temperature operation:		T _C = -55 °C				
Breakdown voltage	4021	Pulsed test (see 4.5.1) t _p = 35 ms	V _{BR2}			
1N6892UTK1, CS,AS		I _R = 5.0 mA(pk)		45		V
1N6893UTK1, CS,AS		I _R = 5.0 mA(pk)		60		V
1N6894UTK1, CS,AS		I _R = 5.0 mA(pk)		80		V
1N6895UTK1, CS,AS		I _R = 5.0 mA(pk)		100		V

See footnotes at end of table.

TABLE I. Group A inspection – Continued.

Inspection <u>1/</u> <u>2/</u>	MIL-STD-750		Symbol	Limits		Unit
	Method	Conditions		Min	Max	
<u>Subgroup 4</u>						
Junction capacitance	4001	$V_R = 5 \text{ V dc}$, $f = 1 \text{ MHz}$, $V_{SIG} = 50 \text{ mV}$ (p-p)	C_J			
1N6892UTK1, CS,AS					5,000	pF
1N6893UTK1, CS,AS					4,000	pF
1N6894UTK1, CS,AS					3,800	pF
1N6895UTK1, CS,AS					3,300	pF
<u>Subgroup 5</u>						
Not applicable						
<u>Subgroup 6</u>						
Surge	4066	See column 3 of 1.3.				
Electrical measurements		See table I, subgroup 2 herein.				
<u>Subgroup 7</u>						
Scope display evaluation	4023	<u>2/</u>				
Electrical measurements		See table I, subgroup 2 herein.				

1/ For sampling plan, see MIL-PRF-19500.

2/ The reverse breakdown characteristics shall be viewed on an oscilloscope with display calibration factors of 2 mA/division and 10 to 20 V/division. Reverse current over the knee shall be at least 10 mA. Each device may exhibit a slightly rounded characteristic and any discontinuity or dynamic instability of the trace shall be cause for rejection.

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TABLE II. Group E inspection (all quality levels) – for qualification and requalification only.

Inspection	MIL-STD-750		Qualification
	Method	Conditions	
<u>Subgroup 1</u>			22 devices, c = 0
Thermal shock (liquid to liquid)	1056	Test condition A, 0°C to +100°C.	
Temperature cycling (air to air)	1051	Test condition C, 500 cycles, -65°C to +175°C.	
Electrical measurements		See table I, subgroup 2 and table III herein.	
<u>Subgroup 2</u>			22 devices, c = 0
Life test	1038	Condition A, t = 1,000 hours $V_R = 80$ percent V_{rated} (see 1.3, column 2 herein).	
Electrical measurements		See table I, subgroup 2 and table III herein.	
<u>Subgroups 3</u>			3 devices, c = 0
DPA	2101	Cross section and scribe and break.	
<u>Subgroup 4</u>			
Thermal impedance curves		Each supplier shall submit their (typical) design thermal impedance curves. In addition, test conditions and $Z_{\theta JX}$ limit shall be provided to the qualifying activity in the qualification report.	
<u>Subgroup 5</u>			
Not applicable			
<u>Subgroup 6</u>			22 devices c = 0
Forward surge	4066	$I_{FSM} =$ see 1.3, column 4; $I_O =$ rated (see 1.3, column 3 herein); $V_{RWM} =$ rated V_{RWM} (see 1.3, column 2). 10 surges of 8.3 ms each at 1 minute intervals. Condition A $+100^\circ\text{C} \leq T_C \leq +125^\circ\text{C}$.	
Electrical measurements		See table I, subgroup 2 except for thermal impedance.	
<u>Subgroup 7</u>			45 devices, c = 0
Soldering heat	2031	One cycle.	
Electrical measurements		See table I, subgroup 2 herein.	

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TABLE III. Groups B, C, and E delta requirements. 1/ 2/ 3/ 4/ 5/

Step	Inspection 1/	MIL-STD-750		Symbol	Limit		Unit
		Method	Conditions		Min	Max	
1.	Forward voltage	4011		ΔV_{F1}	± 50 mV		
2.	Reverse current leakage	4016		ΔI_{R1}	$\pm .5$ mA or 100 percent of initial value whichever is greater.		

- 1/ The delta measurements for table VIa (JANS) of MIL-PRF-19500 are as follows: Subgroups 4 and 5, see table III herein, steps 1 and 2.
- 2/ The delta measurements for table VIb (JAN, JANTX, and JANTXV) of MIL-PRF-19500 are as follows: Subgroup 3, see table III herein, steps 1 and 2.
- 3/ The delta measurements for table VII of MIL-PRF-19500 are as follows: Subgroup 6, see table III herein, steps 1 and 2.
- 4/ The delta measurements for table IX of MIL-PRF-19500 are as follows: Subgroup 1, 2 and 7, see table III herein, steps 1 and 2.
- 5/ Devices which exceed the table I limits for this test shall not be accepted.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Points' packaging activity within the Military Department or Defense Agency, or within the Military Departments' System Command. Packaging data retrieval is available from the managing Military Departments' or Defense Agency's' automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The notes specified in MIL-PRF-19500 are applicable to this specification.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of this specification.
- b. Issue of DODISS to be cited in the solicitation and, if required, the specific issue of individual documents referenced (see 2.1).
- c. Lead finish (see 3.4.2).
- d. Type designation and product assurance level.
- e. Packaging requirements (see 5.1).

6.3 Qualification. With respect to products requiring qualification, awards will be made only for products that are, at the time of award of contract, qualified for inclusion in Qualified Manufacturers List (QML-19500) whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from Defense Supply Center, Columbus, ATTN: DSCC-VQE, P.O. Box 3990, Columbus, OH 43216-5000.

Custodians:
Army - CR
Navy - EC
Air Force - 11
NASA - NA
DLA - CC

Preparing activity:
DLA - CC

(Project 5961-2812)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:

1. DOCUMENT NUMBER
MIL-PRF-19500/721

2. DOCUMENT DATE
28 October 2003

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